Compressed Air Magazine

INDEX—1963

Volume 68 Numbers 1—12

Author Index

AMALRIC, P.
Overseas Transportation Of Liquefied Gas....Nov : 16
Refinery....Mar : 16

ASHMEAD, GORDON
New Tool For Ocean Research....Jan : 4

BONNER, EDWARD O.
Underground Downhole Drilling....Mar : 24

BRANSON, H. K.
Bubbles For Bambi....May : 23

BROWN, ROBERT J.
Roadbuilders Set Stage For Hells Canyon Dam....Jul : 8

CASPER, E. B.
A Million Dollar Fish....Oct : 17

DAVIS, C. E.
Pneumatic Dunnage....Nov : 26

DYMENT, ROBERT
All American Waterway....Dec : 25
Its Name Is Caraboa....Aug : 20
Wave Superheater Hypersonic Tunnel....Jul : 26

HANSSEN, J. O.
Brokke Hydroelectric Power Project, The....Mar : 6

HENDRICKSON, GLOVER
Making Pipe Pneumatically....Jan : 10

JAMES, ROBERT
Big Holes Fast....Oct : 14
Model Air Supply....Feb : 22
Portable Snow....Mar : 12

KARASZEWSKI, H. M.
Air In A Hurry....Dec : 8

KAY, F. X.
Domestic Pneumatics....Apr : 23

KEENAN, A. F.
Making Pencils....May : 8

KIZZOR, A. J.
Built-In Bubbles Bar Ice....Jan : 8

KOFOED, BILL
Fires And Scuba Divers....May : 20
Graveyard Of Ships....Nov : 22

KUTNEWSKY, FREMONT
Hot Wash....Dec : 24

MONTGOMERY, F. A., JR.
Fish Unloading Made Easy....Jun : 24

MOXEY, R. L.
Industrial Crescendo In Japan....Jun : 6
Pipelining In The Old Dominion, Part I....Nov : 8
Pipelining In The Old Dominion, Part II....Dec : 4
Tearing Down To Build Up....Aug : 6
Transonic Dynamics Wind Tunnel....Oct : 8

NEMMERS, R. J.
Making Sippin' Whiskey....Jul : 16
Mining Moly....Apr : 8
Operation Big Lift....Feb : 6
Underground Automated Air Plant....Sep : 8

NICKERT, LOUIS
Making M88's....Jun : 11

PARKHILL, S. M.
Compressed Air Replaced By Muskets....May : 28
Dollars Saved....Apr : 14
Inclined Drilling....Feb : 12
Pipelining In The Old Dominion, Part I....Nov : 8
Pipelining In The Old Dominion, Part II....Dec : 4

PINTO, JOSEPH, JR.
Inclined Drilling....Feb : 12

RODGERS, FRANK
England's "Klondyke"....Feb : 26

STAHLER, CARL
Air Blowing....May : 14

THOMAS, CHARLES F.
Ill Wind That Blew Good....Nov : 29

VIVIAN, C. H.
Iron Horse....Jan : 18
Pennsylvania Station/Madison Square Garden....Jun : 16
Ranque-Hilsch Tube, The....May : 26
Revolution In Blasting....Aug : 14

WAKEFIELD, DANE
Multiple Benefits From Yellowtail....Sep : 12

ZEHR, N. R.
Drilling Down High Up....Apr : 16

Copyright 1963 By Compressed Air Magazine Company. Business, Editorial, And Publication Offices: Phillipsburg, N. J.

Subject-Title Index

ABRASIVES, Glass Beads As....Apr : 26
Aerophysical Tunnel....Jul : 26
Aerosol Can Filling....Aug : 24
Aerospace And Bird Problems....Jun : 20
Aerospace Propulsion....Jan : 16
Aerospace Research....Feb : 19
Aerospace Research....Oct : 22
Aerospace Research....Dec : 19
Aerospace—*See Space*
Aerospace Test Facilities....Nov : 20
Air Blowing—*Carl Stahler*....May : 14
Air-borne Road Slabs....Mar : 29
Air Conditioner, Helmet-Type....Oct : 21
Air Conditioning In Aircraft....Mar : 21
Air Conveyor For Fish....Jun : 24
Air Doors....Nov : 20
Air Hoists—Saving With Air Power....Sep : 20
Air In A Hurry—*H. M. Karaszewski*....Dec : 8
Air Motors And Safety....Aug : 26
Air Plant, Automated....Sep : 8
Air Plant, Underground....Sep : 8
Air Pressure, Reversed—Compressed Air Oddity....Aug : 23
Air Replaces Steam....May : 14
Airship, Proposed....Dec : 19
Air Starters—Saving With Air Power....Sep : 20
Air Statistics: Assembly, Construction—Editorial....Jan : 17
Air System Design....Feb : 22
Air Underground—Editorial....Mar : 23
All American Waterway—*Robert Dyment*....Dec : 25
Alloy Elements—Editorial....Apr : 21
Aluminum....May : 24
Ammonium Nitrate Explosives, Loading....Jun : 23
Ammonium Nitrate/Fuel Oil....Aug : 14
Anaconda Company, The....Jul : 24
Anchors, Ground, Self-Placing....Feb : 18
Archeological Research....Feb : 18
Archer Fish....Sep : 22
Art And Science....Apr : 20
Assembly Technique, Pneumatic....Feb : 20
Atmosphere Standards....Apr : 19
Auger, Pneumatic....Jan : 24
Automobile Fatalities....Jun : 23

BAG-O-MATIC Press....Oct : 32
Ball Bearings In Surgery....Jun : 21
Ball Lightning....Jul : 23
Balloons, Unmanned....Jan : 14
Barrel Organs Of Amsterdam....May : 24
Beethoven's "Battle Symphony"....May : 28
Big Holes Fast—*Robert James*....Oct : 14
Blasting, Revolution In....Aug : 14
Blasting Theory....Feb : 12
Blue Mesa Dam Project....Jan : 8
Brokers' Language....Sep : 22
Brokke Hydroelectric Power Project—*J. O. Hanssen*....Mar : 6
Bubbler System....Jan : 8
Bubbler System And Blasting....Jun : 21
Bubbler System And Fresh Water....Jun : 20
Bubbler System For Conservation....May : 23
Bubbler System For Oil Slicks....Sep : 22
Bubbler System In Steelmaking....Oct : 21
Bubbles For Bambi—*H. K. Branson*....May : 23
Bubbles, Ice Prevention With....Jan : 8
Building Construction....Oct : 21
Building Demolition....Aug : 6
Building Reconstruction....Jun : 16
Building, This Business Of—Editorial....Aug : 25
Built-In Bubbles Bar Ice—*A. J. Kizzor*....Jan : 8

CABLE-LAYING Ship....Nov : 21
Canadian World's Fair....Dec : 14
Canal Construction....Dec : 25
Cans, Manufacture Of....Apr : 19
Carabao....Aug : 20
Casting Centrifugally....Jan : 10
Cerro De Pasco Mine....Apr : 16
Chemistry/Petroleum—Editorial....Oct : 23
Clock, Spilhaus....Nov : 20
Colonial Pipeline....Nov : 8
Colonial Pipeline....Dec : 4
Color, Science Of....May : 23
Compressed Air As A Grinding Fluid....Dec : 22
Compressed Air, Bottled....Oct : 21
Compressed Air Oddities—
Air Pressure, Reversed....Aug : 23
Doors....Aug : 23
Soap Bubbles....Aug : 23
Zacaton Harvesting....Aug : 23
Compressed Air Replaced By Muskets—*S. M. Parkhill*....May : 28
Compressor Control....Apr : 8
Compressor, Historic, Hydraulic....Oct 24
Compressor Station....Jun : 6
Computer, Pneumatic....Mar : 20
Conservation, Animal....May : 23
Construction, Canal....Dec : 25
Construction, Dam....Mar : 6
Construction, Dam....Sep : 12
Construction, Island Building....Dec : 14
Construction, Pipeline....Nov : 8
Construction, Pipeline....Dec : 4
Construction, Pneumatic Bags In....Dec : 19
Conveyor, Powerless....Nov : 21
Copper Mining....Mar : 24
Coriolis Forces....Sep : 22
Cornell Aeronautical Laboratory....Jul : 26
Cornell University Balloon Experiments....Aug : 22
Cornell University Students' Awards....Jul : 24
Cost Cutting....Apr : 14
Couplings, Hose....Feb : 22
Crane Boom, World's Largest....Feb : 19
Crane, Helicopter As....Mar : 21
Crashing Cars Pneumatically....Jun : 22
Curtain Of Air Door....Nov : 20
Cutting Tire Costs—Saving With Air Power....Aug : 27

DAM Construction....Jul : 8
Dam Construction....Sep : 12
Demolition Of Buildings....Aug : 6
DeSimone, R. E.—Moles Awardee....Dec : 20
Dimethyl Terephthalate Manufacture....Jun : 21
Disc Brakes For Verrazano Narrows....Sep : 31
Distillation Of Whiskey....Jul : 16
Diversion Tunnel, Construction Of....Mar : 6
Dollars Saved—*S. M. Parkhill*....Apr : 14
Domestic Pneumatics—*F. X. Kay*....Apr : 23
Doors—Compressed Air Oddity....Aug : 23
Downhole Drilling....Mar : 24
Drill, Gangamatic....Oct : 14
Drilling Down High Up—*N. R. Zehr*....Apr : 16
Drilling Methods....Feb : 12
Drilling Research....Mar : 24
Drilling Scenes, Historic....Jun : 16
Drilling Theory....Feb : 12
Drill Jumbo, Design Of....Mar : 6
Drum Painter....Apr : 30
Dunnage, Pneumatic....Nov : 26

EBERHARD Faber Company....May : 8
Echo II....Sep : 23
Ecuador-Peru Boundary....Jul : 23
Editorials—
Air Statistics: Assembly, Construction....Jan : 17
Air Underground....Mar : 23
Alloy Elements....Apr : 21
Chemistry/Petroleum....Oct : 23
Great National Game, The....Jun : 23
High Cost Of Becoming Smaller, The....Dec : 21
Memorandum, Costs....Dec : 21
Newcomer, A....Dec : 21
Piped Energy....Nov : 25
Pneumatic Numismatics....Jun : 23
Quality Of Togetherness, The....May : 25
Rescue....Sep : 19
Safety, Progress, Competition....Feb : 21
Ten Pillars....Jul : 25
This Business Of Building....Aug : 25
Eggs, Cleaning....Oct : 21
Electrical Painting....Sep : 22
Electronics, Manufacturing In....Feb : 20
Elements, Alloy....Apr : 21
Elevators....Apr : 19
Eliminating A Safety Hazard....Aug : 26
Empire State Express....Jan : 15

Energy, Piped....Nov : 25
England's "Klondyke"—*Frank Rodgers*....Feb : 26
Environmental Control System....Jun : 21
Ethyl Bromide By Radiation....Jan : 16
Expo '67....Dec : 14

FAIR, World's, Canadian....Dec : 14
Fasteners....May : 25
Fire Fighting....Oct : 21
Fires And Scuba Divers—*Bill Kofoed*....May : 20
Fishhook, Project....Oct : 17
Fish Unloading Made Easy—*Frank A. Montgomery, Jr.*....Jun : 24
FLIP....Jan : 4
Flotation Gear....Feb : 6
Fluid Logic Devices....Mar : 20
Fly Ash Useful....Oct : 22
Foundry, Centrifugal....Jan : 10
Fountain Of The Virgin....Mar : 20
Freezing Ground For Excavation....Mar : 20
Freon Wind Tunnel....Oct : 8

GALLERY 273....Apr : 20
Gangamatic Drill....Oct : 14
Gases, Noble....May : 24
Gas Light Lighthouse....Jun : 20
Gas Liquefaction....Jan : 15
Gas, Liquefied, Transportation Of....Nov : 16
Gas Storage Underground....Jun : 21
Gin Bottles, Frosted....Apr : 20
Glass Beads As An Abrasive....Apr : 26
Gliders....Oct : 22
Gliders, Inflated Wings For....Apr : 20
Graveyard Of Ships—*Bill Kofoed*....Nov : 22
Grinding With Air Power....Dec : 22
Ground-Effect Machine....Jan : 14
Ground-Effect Machine....Aug : 20
Gyro-Dril Earth Auger....Jan : 24

HALL Of Free Enterprise....Jul : 25
Heat Sink Refrigeration....Mar : 21
Hells Canyon Dam....Jul : 8
High Cost Of Becoming Smaller, The—Editorial....Dec : 21
Highway Maintenance....Mar : 29
Home Use For Pneumatics....Apr : 23
Hot Wash—*Fremont Kutnewsky*....Dec : 24
Hydroelectric, Brokke Project For, Power....Mar : 6
Hydroelectric Power....Jul : 8
Hydron, Definition Of....Feb : 18
Hydroskimmer Boat....Nov : 21
Hypersonic Wind Tunnel....Jul : 26
Hypersonic Wind Tunnel....Dec : 8

ICE Prevention With Bubbles....Jan : 4
Ill Wind That Blew Good—*Charles F. Thomas*....Nov : 29
Image Orthicon....Feb : 20
Inclined Drilling—*Joseph Pinto, Jr.*, And *S. M. Parkhill*....Feb : 12
Industrial Crescendo In Japan—*R. L. Moxey*....Jun : 6
Iron Horse—*C. H. Vivian*....Jan : 18
Island Building....Dec : 14
Its Name Is Carabao—*Robert Dyment*....Aug : 20

JACK Daniel's Distillery....Jul : 16

KEEPING A Date For 1967....Dec : 14

LANGLEY Research Center....Oct : 8
Laundry For Radioactive Clothing....Dec : 24
Lead Mining, History Of....Feb : 26
Leaning Tower Of Pisa....Jul : 24
Lightning, Ball....Jul : 23
Liquefied Gas Transportation....Nov : 16
Liquid Urethane Spraying....Sep : 27
Locomotives, Old....Jan : 18
Locomotive, Old....Jan : 15
Locomotives, Steam....Jan : 15
Low-Pressure Gases....Nov : 16
Lunar Transportation....Aug : 22

MADISON Square Garden....Jun : 16
Making M88's—*Louis Nickert*....Jun : 11
Making Pencils—*A. F. Keenan*....May : 8
Making Pipe Pneumatically—*Glover Hendrickson*....Jan : 10
Making Sippin' Whiskey—*R. J. Nemmers*....Jul : 16
Maracaibo, Lake....Nov : 20
Maraging Steel Patents....Oct : 22
Marine Physical Laboratory....Jan : 4
Marine Pollution Control....Feb : 10
Marine Salvage....Feb : 6
Marine Stabilization Apparatus....Mar : 21
Memorandum, Costs—Editorial....Dec : 21
Metal Marking....Nov : 20
Methane Tanker....Apr : 19
Micronizer....Dec : 22
Microscope, Muller Field Ion....Jul : 29
Miles, S. E., Jr.—Moles Awardee....Dec : 20
Million Dollar Fish, A—*E. B. Casper*....Oct : 17
Mine Disaster And Rescue....Sep : 24
Mining Anecdote....Nov : 29
Mining At High Altitudes....Apr : 16
Mining, Award For Distinguished Work In....Mar : 14
Mining, Blasting Methods In....Aug : 14
Mining Copper....Mar : 24
Mining Diamonds From Under The Sea....Apr : 20
Mining, History Of....Feb : 26
Mining In Peru....Apr : 16
Mining Moly—*R. J. Nemmers*....Apr : 8
Mining, Open Pit....Feb : 12
Mining Practice, Underground....Mar : 24
Mining Under The Sea....Apr : 20
Mining Zinc....Sep : 8
Missile Launcher, Pneumatic....Feb : 19
Missile, Test Facilities For....Oct : 17
Model Air Supply—*Robert James*....Feb : 22
Moles Awards, 1964....Dec : 20
Molybdenum Mine....Apr : 8
Multiple Benefits From Yellowtail—*Dane Wakefield*....Sep : 12

NATIONAL Game, The Great—Editorial....Jun : 23
Newcomer, A—Editorial....Dec : 21
Newspaper Strike....Apr : 19
New Tool For Ocean Research—*Gordon Ashmead*....Jan : 4
New York World's Fair....May : 23
Northrop Norair Hypersonic Wind Tunnel....Dec : 8
Nuclear Energy, Commercial Use Of....Jan : 16
Nuclear Laundry....Dec : 24

OCEANOGRAPHIC Research....Jan : 4
Oceanographic Research....Jan : 15
Oil Slicks, Controlling....Feb : 10
Open Pit Mining....Apr : 16
Operation Big Lift—*R. J. Nemmers*....Feb : 6
Overseas Transportation Of Liquefied Gas—*P. Amalric*....Nov : 16
Oxygen, Manufacture Of....Jan : 16

PAINTING Pneumatically....Apr : 30
Painting With Electricity....Sep : 22
Papermaking Machine....Mar : 20
Pencils, Manufacture Of....May : 8
Penguin Mating Habits....Jul : 24
Pennekamp Park....Nov : 22
Pennsylvania Station/Madison Square Garden—*C. H. Vivian*....Jun : 16
Peru-Ecuador Boundary....Jul : 23
Petrochemical Industry....Mar : 16
Philip Sporn Prizes....Jul : 24
Photography, High-Speed....Feb : 18
Piccolo Dick....Nov : 29
Pictures, Power Of....Dec : 19
Pipe Manufacturing....Jan : 10
Piped Energy—Editorial....Nov : 25
Pipeline Construction....Nov : 8
Pipeline Construction....Dec : 4
Pipelining....Nov : 25
Pipelining In The Old Dominion, Part I—*R. L. Moxey* And *S. M. Parkhill*....Nov : 8
Pipelining In The Old Dominion, Part II—*R. L. Moxey* And *S. M. Parkhill*....Dec : 4
Pisa, Leaning Tower Of....Jul : 24

Plasma Arc....Jan : 14
Plastic Tires....Dec : 19
Pneumatically Packed Sand....Jan : 10
Pneumatically Unloading Fish....Jun : 23
Pneumatic Bags....Feb : 6
Pneumatic Bags In Construction....Dec : 19
Pneumatic Computer....Mar : 20
Pneumatic Dunnage—*C. E. Davis*....Nov : 26
Pneumatic Gloves....Dec : 19
Pneumatic Gun....Jan : 15
Pneumatic Inspection Technique....Feb : 18
Pneumatic Numismatics—Editorial....Jun : 23
Pneumatic Painting....Apr : 30
Pneumatics In The Home....Apr : 23
Pneumatic Typewriter....Dec : 12
Pneumatic Weaving....Feb : 19
Pneumatic Yardstick....Sep : 23
Pollution Control....Mar : 21
Pollution Control....Jun : 20
Pollution Control, Marine....Feb : 10
Portable Snow—*Robert James*....Mar : 12
Power And Tool....Mar : 22
Powerless Conveyor....Nov : 21
Power Stations, Safety In....Aug : 26
Press, Bag-O-Matic....Oct : 32
Pressure Ranges....Jun : 21
Project Shoal....Jan : 14
Pyrolytic Graphite For Nozzle Throats....Jun : 27

QUALITY Of Togetherness, The—Editorial....May : 25
Quarry, Drilling Operations In A....Feb : 12

RADOMES....Apr : 20
Ragged Chute Compressor....Oct : 24
Railroad History....Jan : 18
Railroad, Model....Oct : 21
Railroad Station History....Jun : 16
Ranque-Hilsch Tube, The—*C. H. Vivian*....May : 26
Ray-Jet Heating....Jul : 24
Reconstruction, Building....Jun : 16
Recording, Unique....May : 28
Refinery On The Seine—*P. Amalric*....Mar : 16
Refining, French Petroleum....Mar : 16
Refrigeration, Heat Sink....Mar : 21
Renouard, E. I.—Saunders Gold Medal Awardee....Mar : 14
Rescue—Editorial....Sep : 19
Research In Abrasives....Apr : 26
Revolution In Blasting—*C. H. Vivian*....Aug : 14
Riveting Hammer—Saving With Air Power....Sep : 20
Roadbuilders Set Stage For Hells Canyon Dam—
Robert J. Brown....Jul : 8
Rocket Motor Throats....Jun : 23
Rubber Process, New....Sep : 22

SAFE Pneumatic Loading Of Ammonium Nitrate....Jun : 27
Safety Costs....Dec : 21
Safety In Power Stations....Aug : 26
Safety, Office....Sep : 22
Safety On Aircraft Carriers....Dec : 19
Safety—Pneumatic Inspection Technique....Feb : 18
Safety: Progress, Competition—Editorial....Feb : 21
Safety Testing Automobiles....Jun : 23
Safety Tires....Mar : 20
Salt Production....Jun : 20
Salvage, Marine....Feb : 6
Saunders, William Lawrence, Gold Medal Award....Mar : 14
Saving With Air Power—
Air Hoists....Sep : 20
Air Starters....Sep : 20
Cutting Tire Costs....Aug : 27
Riveting Hammer....Sep : 20
Science Advances Rapidly....Jun : 20
Science Of Color....May : 23
Scuba Diving....May : 20
Sewer, Flexible....Apr : 19
Shaft Sinking With Ground Freezing....Mar : 20
Sheppton Disaster And Rescue....Sep : 19
"Signs Of Our Times" Reviewed....Sep : 22
Simulated Service Tests....Oct : 27
Skindivers, Park For....Nov : 22
Slick Solution....Feb : 10
Snake River....Jul : 8
Snare, Project....Oct : 17
Snowmaking....Mar : 12
Soap Bubbles—Compressed Air Oddity....Aug : 23
Solar Research....Aug : 22
Something About Titanium....Apr : 22
Soot Blowing....May : 14
Space—*See Aerospace*
Space Vacuum Chamber....Oct : 21
Sporn, Philip, Prizes....Jul : 24
Spring Of Live Mermaids, The....Jul : 13
Stabilizer....Mar : 21
Standards, Atmosphere....Apr : 19
Steam Hose Costs....Jan : 14
Steel Blasting....May : 24
Steelmaking....May : 24
Steelmaking, Rotating Furnace For....Dec : 19
Subaqueous Living....Jan : 15
Subaqueous Show....Jul : 13
Subway, Tokyo's....Nov : 20

TANKER, Methane....Apr : 19
Tank Recovery Vehicles, Manufacture Of....Jun : 11
Taxes In 2000 A.D....Aug : 22
Taylor Hydraulic Compressor....Oct : 24
Tearing Down To Build Up—*R. L. Moxey*....Aug : 6
"Tecnica Del Aire Comprimido" Announced....Dec : 21
Television, Closed-Circuit....Aug : 22
Tendamatic Control....Apr : 8
Tennessee Whiskey....Jul : 16
Ten Pillars—Editorial....Jul : 25
Tire Costs, Cutting....Aug : 27
Tire, Plastic....Dec : 19
Tire, Pneumatic, with Tungsten Tread....Mar : 20
Tire Repair....Jul : 23
Titanium....Apr : 22
Tooling Program....Apr : 14
Tool, Portable Hydraulic....Mar : 22
Tools, Archeological....Feb : 18
Transonic Dynamics Wind Tunnel—*R. L. Moxey*....Oct : 8
Transportation Facts....Dec : 21
Transportation Of Liquefied Gas....Nov : 16
Transportation, Pneumatic Dunnage In....Nov : 26
Trolleys, Historic....Dec : 19
Tunnel, Biblical....Mar : 20
Typewriter, Air-Operated....Dec : 12

UBE Industries, Ltd....Jun : 6
Undercap Filling....Aug : 24
Underground Automated Air Plant—*R. J. Nemmers*....Sep : 8
Underground Downhole Drilling—*Edward O. Bonner*....Mar : 24
Underwater Park....Nov : 22
Underwater Swimming Show....Jul : 13
Urdaneta, Lake....Nov : 20
Urethane, Spraying....Sep : 27

VACUUM Bailing....Jan : 14
Vacuum Chamber, Space....Oct : 21
Vacuum Seals, Testing....Oct : 27
Vapor Collector, Plastic....Aug : 22
Ventilation Apparatus....Mar : 21
Verrazano Narrows Bridge....Sep : 31
Vortacool....May : 26

WASA"....Aug : 22
"Wasa"....Oct : 21
Waste Disposal....Apr : 19
Waste Treatment....Mar : 21
Wave Superheater Hypersonic Tunnel—*Robert Dyment*....Jul : 26
Weaving Pneumatically....Feb : 19
Weeki Wachee Spring....Jul : 13
Whiskey Production....Jul : 16
Wind Tunnel, Growing Plants In....Nov : 21
Wind Tunnel, Hypersonic....Jul : 26
Wind Tunnel, Hypersonic....Dec : 8
Wind Tunnel, Transonic....Oct : 8
World's Most Powerful Microscope....Jul : 29

YELLOWTAIL Dam....Sep : 12

ZACATON Harvesting—Compressed Air Oddity....Aug : 23
Zero-Gravity Tower....Nov : 22
Zinc Mining....Sep : 8